

REMARKS

Claims 1 to 37 have been cancelled without prejudice or disclaimer. New claims 40 to 52 have been added. Upon entry of this Preliminary Amendment, claims 38-52 will be pending in the application. Support for claims 40-52 may be found in the specification. For example, the specification states on page 15, lines 19-23: "[p]olypeptide products of the invention may be "labeled" by association with a detectable marker substance (e.g., radiolabeled with ¹²⁵I) to provide reagents useful in detection and quantification of MI in solid tissue and fluid samples such as blood or urine." Support for claims 40-52 also may be found in the specification on page 17, lines 32-35; beginning on page 18, line 31, to page 19, line 17; and in Example 6. No new matter has been added.

In lieu of submitting a computer-readable copy of the Sequence Listing, Applicants request that the computer-readable form filed on March 24, 1999, in parent application 08/803,954 be used. The undersigned hereby certifies, in accordance with 37 C.F.R. § 1.821(f), that the contents of the paper copy enclosed and of the computer-readable Sequence Listing filed on March 24, 1999, are the same.

The instant application is a divisional of U.S. Patent Application No. 08/803,954, filed February 21, 1997, which is a divisional of U.S. Patent Application No. 08/212,660, filed March 11, 1994, which is a continuation of U.S. Patent Application No. 08/087,021, filed July 6, 1993, which is a continuation of U.S. Patent Application No. 07/710,728, filed June 3, 1991, which is a continuation-in-part of U.S. Patent Application No. 07/501,904, filed March 29, 1990, which is a continuation-in-part of U.S. Patent Application No. 07/355,027, filed May 19, 1989. The sequences in the enclosed

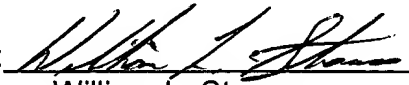
Sequence Listing were first disclosed in U.S. Patent Application No. 07/710,728, filed June 3, 1991. The sequence disclosed on page 44 of the specification was present in U.S. Patent Application No. 07/501,904, which is before October 1, 1990. Thus, that sequence does not need to appear in the Sequence Listing. Therefore, only those sequences that first appeared in U.S. Patent Application No. 07/710,728, *i.e.*, those sequences disclosed on page 97 and in Figure 32, need to be included in a Sequence Listing and be identified with sequence identifiers. Applicants have amended the specification to insert the Sequence Listing and to add the required sequence identifiers. No new matter has been introduced.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: August 29, 2001

By: 
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APPENDIX TO PRELIMINARY AMENDMENT OF AUGUST 29, 2001

Amendments To The Specification

On page 9, please replace the paragraph beginning on line 8 with the following amended paragraph:

--Figure 32 shows results of amino terminal amino acid sequencing of peptides (SEQ ID No.: 2, SEQ ID No.: 3, SEQ ID No.: 4, SEQ ID No.: 5) of the SDS PAGE bands 1, 2, and 3 that were generated by plasmin digestion of CHO-derived human MI.--

On page 97, please replace the paragraph beginning on line 1 with the following amended paragraph:

--The apparent size of peptide 3 by SDS-PAGE (14.5 kDal; Figure 31) suggests that it contains about 130-135 amino acids. Since it retains the N-terminal region, it would correspond to amino acids 1-130/135 of MI. By SDS-PAGE using gels with high percentage acrylamide, a small (2.5 kDal) fragment could be visualized in plasmin digests of MI. This fragment had the N-terminal sequence (Cys)-Pro-Met-Ile-Pro-(Cys)-[Tyr-Ile-Ser-Ser-Pro-()-Glu-] Tyr-Ile-Ser-Ser-Pro-Xaa-Glu- (SEQ ID No: 1), i.e., it starts at residue 133 of MI (see Figure 2), and results from cleavage by plasmin of the bond between Arg 132 and Cys 133. It is likely that the 2.5 kDal fragment extends to residue Arg 170, and that after plasmin treatment under non-reducing conditions, the fragment representing amino acids 171-194 remains attached to the 1-132 fragment via a disulfide bond between Cys 128 and Cys 175. This suggestion is based on the [likelihood] likelihood that human MI has the same disulfide structure as human TIMP

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[Williamson et al., Biochem. J. 268, 267-274 (1990)]. The theoretical disulfide structure for human MI is shown in linearized fashion in Figure 34. The numbers in Figure 34 indicate the positions of Cys residues and the brackets indicate disulfide linkages inferred by analogy to those present in TIMP and probably MI as well. The arrowheads indicate positions of Lys and Arg residues. Note that the fragment 133-170 produced by plasmin cleavage has two internal disulfide bonds (Cys 133-Cys 138 and Cys 146-Cys 167) but no covalent linkages to fragment 1-132 or fragment 171-194. As suggested above, the disulfide bond Cys 128-Cys 175 would keep fragments 1-132 and 171-194 covalently linked after excision of fragment 133-170 by plasmin.--

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